

In the claims:

1. (Previously Amended) A method of inducing tolerance to a transplant transplanted from a donor to a recipient, the method comprising:

- (a) culturing an HPC population derived from said donor under growth conditions suitable for inducing myeloid differentiation, thereby generating a tolerance-inducing cell population; and
- (b) administering a dose of said tolerance-inducing cell population prior to, concomitantly with or following transplantation of the transplant, thereby inducing tolerance to the transplant in the recipient.

2. (Original) The method of claim 1, further comprising the step of conditioning the recipient under sublethal, lethal or supralethal conditions prior to step (b).

3. (Original) The method of claim 1, wherein the donor is selected from the group consisting of an allogeneic donor and a xenogeneic donor.

4. (Original) The method of claim 1, wherein the donor and the recipient are both humans.

5. (Original) The method of claim 1, wherein the transplant is selected from the group consisting of cells, a tissue and an organ.

7. (Original) The method of claim 1, wherein said growth conditions are selected so as to induce differentiation into CD33+ cells in said HPC population.

9. (Original) The method of claim 1, wherein said tolerance-inducing

cell population predominantly expresses CD33.

10. (Currently Amended) The method of claim 1, wherein ~~said veto~~a tolerance-inducing activity is enhanced in each cell of said ~~HPC-cell~~ population.

11. (Currently Amended) The method of claim 1, wherein said dose of tolerance-inducing cells possesses sufficient ~~veto~~tolerance-inducing activity so as to enable engraftment of MHC-mismatched transplants.

12. (Currently Amended) A method of transplanting a transplant derived from a donor to a recipient, the method comprising:

- (a) administering to the recipient a dose of cultured HPCs derived from said donor, cultured under conditions suitable for inducing myeloid differentiation, said cultured HPCs having enhanced ~~veto~~tolerance-inducing activity as compared to non-cultured HPCs; and
- (b) transplanting the transplant to the recipient.

13. (Original) The method of claim 12, further comprising the step of conditioning the recipient under sublethal, lethal or supralethal conditions prior to step (b).

14. (Original) The method of claim 12, wherein step (a) is performed prior to, concomitantly with or following step (b).

15. (Original) The method of claim 12, wherein the donor and the recipient are both humans.

16. (Original) The method of claim 12, wherein the transplant is selected from the group consisting of cells, a tissue and an organ.

17. (Original) The method of claim 12, wherein said cultured HPCs are cultured in vitro.

19. (Original) The method of claim 12, wherein said cultured HPCs predominantly express CD33.

20. (Currently Amended) The method of claim 12, wherein said enhanced ~~veto~~-tolerance inducing activity is enhanced in each cell of said cultured HPCs.

21. (Currently Amended) The method of claim 12, wherein said dose of cultured HPCs possesses sufficient ~~veto~~-tolerance-inducing activity so as to enable engraftment of MHC-mismatched transplants.

22-45. (Withdrawn)

46. (Previously Added) The method of claim 1, wherein said culturing said HPC population is effected in absence of exogenously added IL-2, TNF- α and/or IFN- γ .

47. (Previously Added) The method of claim 12, wherein said cultured HPCs are cultured in absence of exogenously added IL-2, TNF- α and/or IFN- γ .